

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in this application:

LISTING OF CLAIMS:

Claims 1 to 15. (Canceled).

16. (Currently Amended) A fuel injector for use in projecting directly into a combustion chamber of an internal combustion engine, the fuel injector comprising:

- a fuel inlet;
- a movable valve-closure member;
- a fixed valve seat element to cooperate with the valve-closure member to open and close a valve; and
- a downstream valve end including an outlet component and a fuel outlet, wherein:
 - the fuel outlet includes at least one discharge orifice of the outlet component,
 - the outlet component including the at least one discharge orifice is configured to be flat, disk-shaped, is arranged directly downstream of the fixed valve seat element, and is permanently joined to the fixed valve seat element,
 - the discharge orifice of the outlet component is inclined at an angle relative to the longitudinal axis of the valve,
 - the discharge orifice ends in an outlet area configured as a convexly-arched spray-discharge region that extends beyond the outlet component in a downstream direction, the outlet area being a most downstream portion of the downstream valve end and the outlet area including a spray-discharge region thickness greater than a peripheral thickness of the outlet component surrounding the outlet area, and
 - the outlet component includes a coating around the at least one discharge orifice, including at least in an immediate exterior of the outlet area configured as a convexly-arched spray-discharge region.

Claims 17 and 18. (Canceled).

19. (Previously Presented) The fuel injector of claim 16, wherein the internal combustion engine includes an externally supplied ignition.

20. (Previously Presented) The fuel injector of claim 16, wherein the internal combustion engine includes an auto-ignition.

21. (Previously Presented) The fuel injector of claim 16, wherein the coating is provided in a ring shape around the at least one discharge orifice on a downstream exterior surface of the outlet component, and wherein the coating includes a layer containing fluorosilicate.

22. (Previously Presented) The fuel injector of claim 16, wherein the coating is provided over an entire surface of a downstream exterior surface of the outlet component, and wherein the coating includes a layer containing fluorosilicate.

23. (Previously Presented) The fuel injector of claim 21, wherein the coating extends into the at least one discharge orifice.

24. (Previously Presented) The fuel injector of claim 21, wherein the layer containing fluorosilicate is applied by one of spraying and dipping.

25. (Previously Presented) The fuel injector of claim 22, wherein the coating extends into the at least one discharge orifice.

26. (Previously Presented) The fuel injector of claim 16, further comprising:
a swirl element to impress a swirl component on fuel to be discharged, the swirl element arranged directly upstream of the fixed valve seat element; and
a guide element to guide the movable valve-closure member, the guide element arranged directly upstream of the swirl element.

27. (Previously Presented) The fuel injector of claim 26, wherein the guide element includes a dimensionally accurate guide opening to guide the movable valve-closure member.

28. (Previously Presented) The fuel injector of claim 26, wherein the guide element is disk-shaped.

29. (Previously Presented) The fuel injector of claim 26, wherein the swirl element is produced by one of stamping, wire electrical discharge machining, laser cutting, etching, and electrodeposition.

30. (Previously Presented) The fuel injector of claim 26, wherein the swirl element includes an inner swirl chamber and a plurality of swirl ducts.

31. (Previously Presented) The fuel injector of claim 26, wherein the swirl element is disk-shaped.

32. (New) The fuel injector of claim 16, wherein the coating includes at least one of catalytically acting layers, wetting layers, and reaction layer-preventing layers.

33. (New) The fuel injector of claim 32, wherein the catalytically acting layers include at least one of cobalt, nickel, ruthenium, rhodium, palladium, osmium, iridium, platinum, and oxides and alloys thereof.

34. (New) The fuel injector of claim 32, wherein the wetting layers include at least one of ceramic coatings, metal-containing carbon coatings, metal-free carbon coatings, fluorine-containing coatings, and sapphire coatings.

35. (New) The fuel injector of claim 34, wherein the fluorine-containing coatings include at least one of heat-resistant PTFE-similar coatings, organic ceramic coatings, and fluorosilicate coatings.

36. (New) The fuel injector of claim 32, wherein the reaction layer-preventing layers include at least one of nitrite layers and oxide layers.

37. (New) The fuel injector of claim 36, wherein the nitrite layers include at least one of titanium nitrite and chromium nitrite.

38. (New) The fuel injector of claim 36, wherein the oxide layers include at least one of tantalum oxide and titanium oxide.